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Project Report
Prairie Solar Energy Project
Champaign County, Illinois

Prepared for

Patrick Brown
Prairie Solar 1 LLC

Prepared by

Dudek

October 2018

PROJECT REPORT

PRAIRIE SOLAR ENERGY PROJECT

Prepared for

Prairie Solar I, LLC
17901 Von Karman Avenue, Suite 1050
Irvine, California 92614

Prepared by

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CONTENTS

Figures

Tables

Appendices

1.0 ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Definition
AC	alternating current
Applicant	Prairie Solar I, LLC
County	Champaign County
DC	direct current
gen-tie line	generation tie line
kV	kilovolt
MW	megawatt
Project	Prairie Solar Energy Project
PV	photovoltaic
SCADA	supervisory control and data acquisition
SUP	Special Use Permit

2.0 INTRODUCTION

The proposed Prairie Solar Energy Project represents the "Project" for purposes of the Project Description contained here within. The Project is proposed by Prairie Solar 1, LLC (Applicant) and includes solar energy project components and associated ancillary facilities.

The Applicant proposes to construct and operate the Project on approximately 1,275 acres to produce approximately 150 Megawatt (MW) photovoltaic (PV) solar energy facility with associated on-site substation, inverters, fencing, roads, and supervisory control and data acquisition (SCADA) system. The Project would also include a 138-kilovolt (kV) overhead generation tie line (gen-tie line), which would extend approximately 1,500 feet from the on-site substation to the adjacent Ameren Illinois substation located northwest of the project site. See the full site plan in Appendix One.

3.0 SITE DESCRIPTION

The Project site is located in Sidney Township, in northeastern Champaign County (County) Illinois (Figure 1, Project Location). The Project site is approximately 9 miles southeast of the City of Champaign and .50 mile southeast of the Village of Sidney, and intersects the unincorporated community of Rutherford. The Project site is located east of S. Bryant Road. County Road 900 traverses the site from east to west, and County Road 2200 E. and County Road 2300 E traverse the site from north to south. The Project site is located adjacent to the Village of Sidney to the northwest, and agricultural operations to the north, east, south and west. A gen-tie line would extend west approximately 1,500 feet from the Project site to the existing Ameren Illinois substation located to the northwest of the project site.

The location of the Project was selected because of its proximity to the existing Ameren Illinois transmission corridor, the site's nearby access to existing roads, and the site's excellent solar irradiance. Locally, site access to the Project would be located at five different locations along County Road 900 N, three different locations along County Road 2300 E, and one location along County Road 2200E.

The Project site and surrounding properties are mostly composed of agricultural operations. An existing Ameren Illinois transmission line corridor exists along the northern edge of the project site, a second transmission corridor runs north to south along County Road 2200E, and two additional transmission corridors run east to west across the project site. Visual Simulations have been prepared to demonstrate what the project would look like from the closest residences near the project. See Appendix Two for the Visual Simulations.

3.1 Land Use

The Project site is located within the jurisdiction of both Champaign County and the Vilage of Sidney. As shown in Figure 3, the northwest portion of the project site is zoned Industrial in the Comprehensive Plan for the Village of Sidney, Illinois. Based on the Champaign County Zoning Ordinance, the project site is zoned AG-1 (Agricultural). In accordance with the forthcoming solar farm zoning ordinance amendment for Champaign County, the project site would be located within the AG-1 zone, where solar farms may be permitted with a Special Use Permit (SUP), and would be located at least ½ mile from the municipal boundary of Sidney.

4.0 PROJECT DESCRIPTION

The Project consists of the following components:

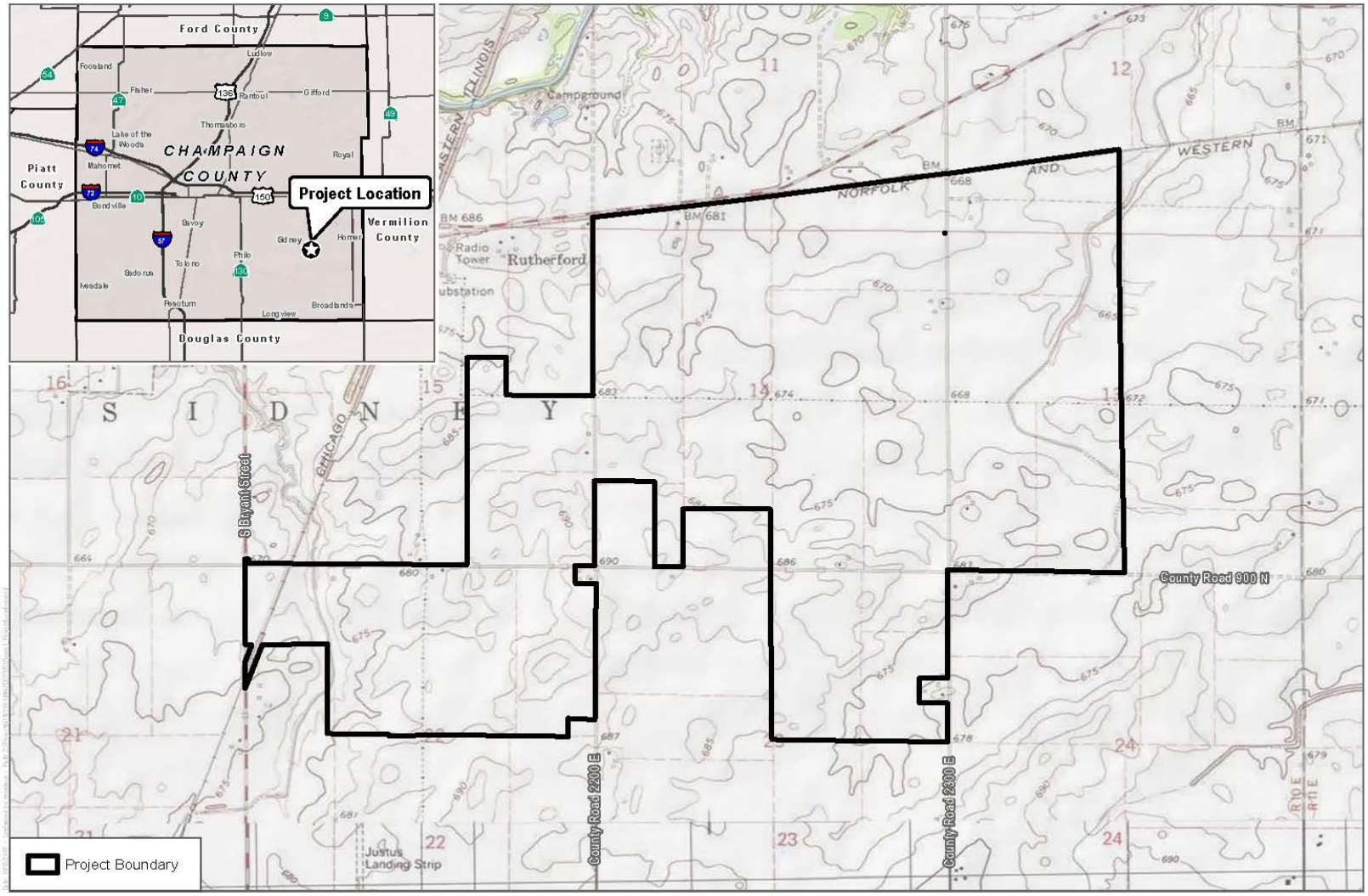
- Solar energy generation system
- On-site substation
- Gen-tie line
- Ancillary facilities

4.1 Solar Energy Generation System

The Project includes up to a 150 MW solar power generating installation. The project is located within approximately 1,275-acre site would house all structures, including solar panels, single-axis tracking support structures, inverters, SCADA, and interconnection facilities (on-site substation), all of which would be enclosed by a perimeter security fence. The proposed site plan is shown on Figure 2. Solar energy would be captured by PV panels mounted to a single-axis racking system. The high-efficiency commercially available PV panels convert incoming sunlight to direct current (DC) electrical energy. The panels are arranged in series to effectively increase output voltage to approximately 1,500 volts. These series chains of panels are called "strings" in industry terms and provide the basic building block of power conversion in the solar array. The strings are combined in the solar field through an above- or belowground DC collection system, and then further ganged together at the inverter stations, where the energy is converted to AC and then stepped to an intermediate voltage, typically 34.5 kV. The chosen PV panel would be poly-crystalline and would be well suited for the environment due to their durability and reliability.

The racking system would be supported, when practical, by driven piers (piles) directly embedded into the ground, and would be parallel to the ground. Each rack would hold approximately 80 to 90 panels (depending on final configuration) and at its highest edge would have a maximum height up to 10 feet above grade, depending on the dimensions of the chosen panel and racking technology. The minimum clearance from the lower edge of the panel to ground level would be approximately 18 to 24 inches, pending final design. The single-axis tracking system would rotate slowly throughout the day at a range of +/- 60 degrees facing east to west to stay perpendicular to the incoming solar rays so that energy production would be optimized.

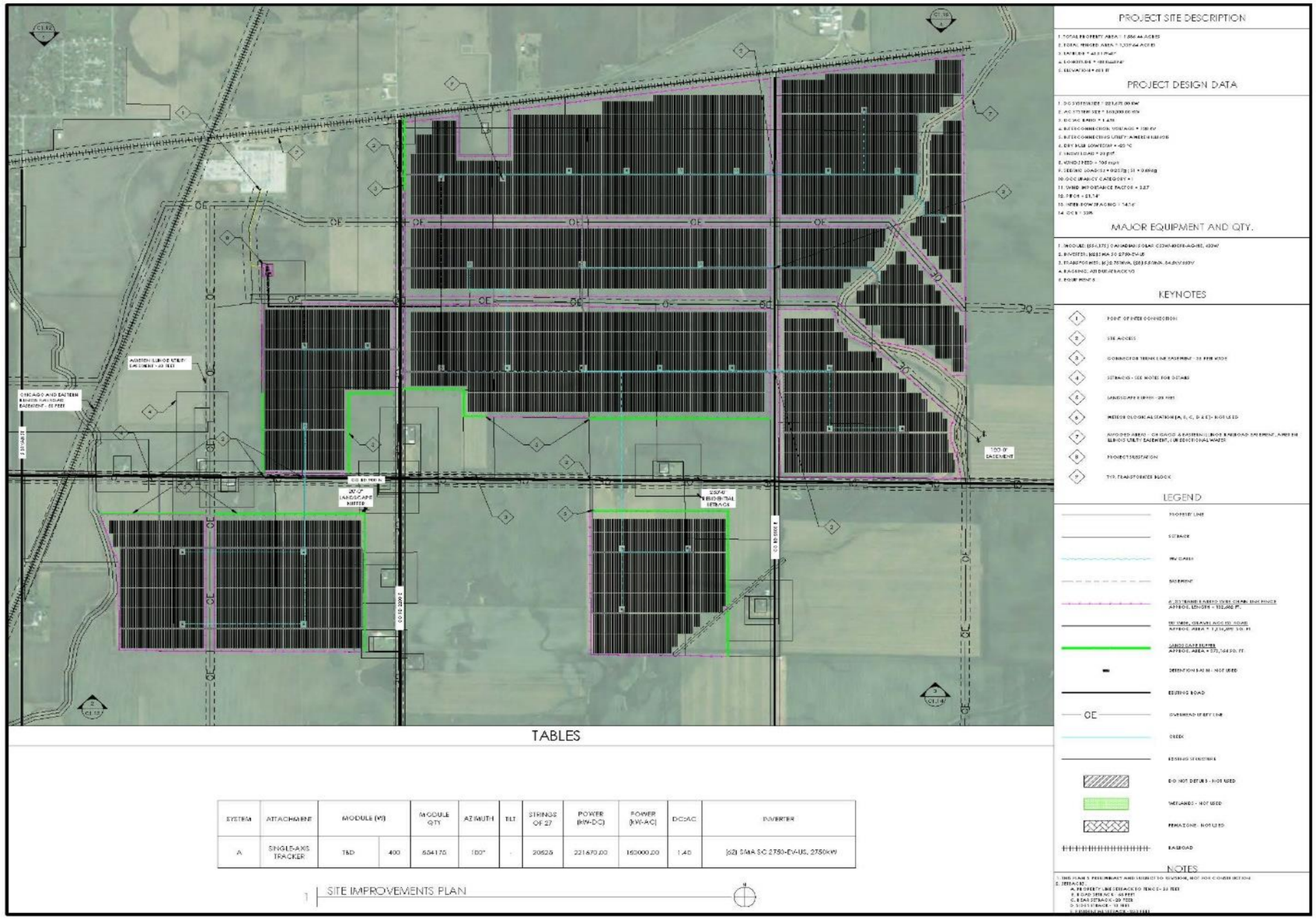
The inverter stations would be up to 10 feet in height and perform three critical functions for the solar facility: (1) collect DC power in a central location, (2) convert the DC power into AC power, and (3) convert low-voltage AC power to medium-voltage AC power. The inverter stations are typically open-air. The stations consist of DC collection equipment, utility-scale inverters, and a low- to medium-voltage transformer. The output power from the inverter stations is then fed to the AC collection system through an above- or belowground collection system. This AC collection system would deliver the electricity to the on-site substation, where the voltage would be stepped up through a transformer to the interconnection voltage.



SOURCE: USGS 7.5-Minute Series St. Joseph Quadrangle

DUDEK 0 1,000 2,000 Feet

FIGURE 1
Project Location
Prairie Solar Project



SOURCE: BayWa 2018

FIGURE 2
Site Plan
Prairie Solar Project

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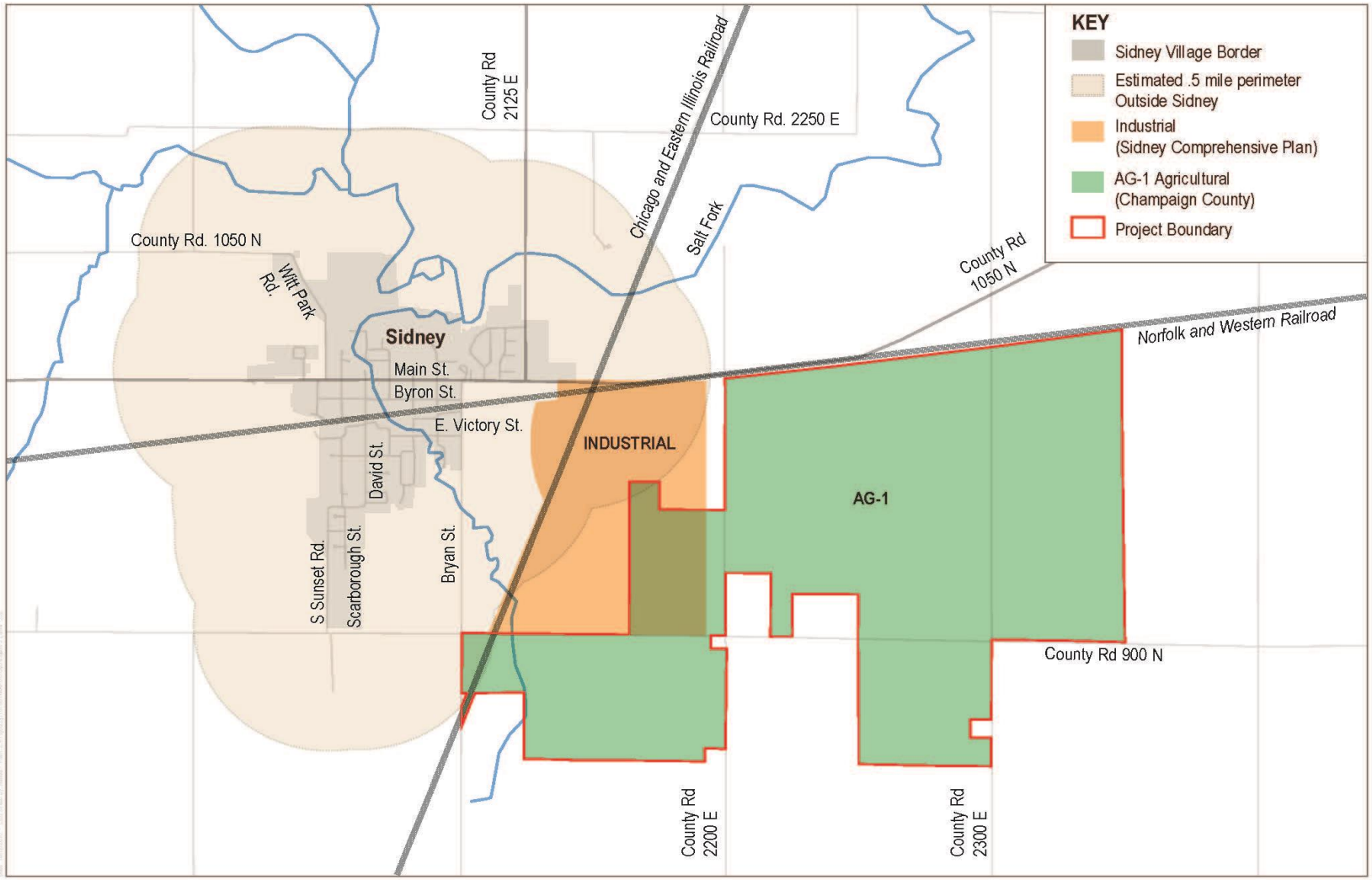

SOURCE: The Comprehensive Plan 2018

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FIGURE 3
Land Use
Prairie Solar Project

4.2 On-Site Substation

The Project on-site substation would be the termination point of the collection system for 34.5 kV electricity. The output of the entire field would be passed through a final interconnection step-up transformer to convert it to the grid tie voltage at 138 kV. Additionally, the Project on-site substation would host the grid intertie safety equipment and switches required to interconnect to the Ameren Illinois high-voltage substation. The footprint of the on-site substation would be approximately 300 feet by 200 feet. The Project on-site substation would consist of components up to 55 feet in height, and feeders would be overhead lines constructed with 45-foot-tall and 60-foot-tall poles for the single and double circuits, respectively.

4.3 Ancillary Facilities

Access Road

The Project access roads would be 16 feet wide and composed of compacted native material. The Project access roads would connect to County Road 900 N, County Road 2200 E, and County Road 2300 E, which traverse the project site.

Signage

A small sign at the main entry to the Project would be installed. The sign would be no larger than 8 feet by 4 feet and would read "Prairie Solar 1, LLC." In addition, required safety signs identifying high voltage within the facility, as well as information for emergency services, would be installed on the fence near all entrances.

Perimeter Fence

The perimeter of the Project site would be enclosed by an approximately 6-foot-tall chain-link fence topped with 1 foot of three-strand barbed wire. Access into the Project site would be provided through drive-through gates. The main purpose of the fence is to prevent unauthorized access to the site. The total height, above grade, of the fence would be approximately 7 feet.

Lighting

Low-elevation (<14 foot), controlled security lighting would be installed at primary access gates and the on-site substation. The lighting would only switch on when personnel enter the area (through either motion-sensor or manual activation [switch]). All safety and emergency services signs would be lit when the lights are on. The lighting would be shielded so the light is directed downwards. Electrical power to supply the access gate and lighting would be obtained from Ameren Illinois. Lighting would only be in areas where it is required for safety, security, or operations. All lighting would be directed on site and would include shielding as necessary to minimize illumination of the night sky or potential impacts to surrounding viewers.

5.0 CONSTRUCTION

5.1 Construction Activities

Construction will be composed of the following activities:

- Perimeter fence installation
- Site preparation and clearing/grading
- Underground work (trenching)
- System installation
- Gen-tie installation
- Testing and commissioning

Because the Project site is fairly level, grading is expected to be minor in most instances. However, grading would occur throughout the site, especially for the construction of roads, inverter pads, and the substation. This would be accomplished with scrapers, motor graders, water trucks, dozers, and compaction equipment. The PV modules would be off-loaded and installed using small cranes, boom trucks, forklifts, rubber-tired loaders, rubber-tired backhoes, and other small- to medium-sized construction equipment as needed. Construction equipment would be delivered to the site on "low-bed" trucks unless the equipment can be driven to the site (e.g., boom trucks). It is estimated that there would be approximately 30 pieces of construction equipment on site each month.

Vegetation on the site would be modified only where necessary. Vegetation would be removed where roads would be constructed, and where transmission pole and tracker posts would be installed (if necessary). At locations where transmission pole and would be installed, minor cuts may be required. Minor earthwork would also occur to install access roads and transmission line maintenance roads. The surface of the roads would be at-grade to allow any water to sheet flow across the site as it currently does.

5.2 Construction Schedule

This Project is anticipated to be built over an approximately 12-month timeframe from the onset of perimeter fence installation through testing and commissioning of the facility. It is anticipated that the work would be completed in 8- to 10-hour shifts, with a total of five shifts per week (Monday–Friday). Overtime and weekend work would be used only as necessary to meet scheduled milestones or accelerate schedule and would comply with all applicable Illinois labor laws. Primary construction activities and durations are presented in Table 1. The activities shown in Table 1 would overlap in certain phases, and all are expected to occur within the estimated 12-month construction duration.

Table 1. Proposed Project Construction Duration, Equipment, and Workers by Activity

Activity	Duration	Equipment	Pieces	Daily Workers
Perimeter fence installation	2.5 months	Skid loader with auger attachment	1	Maximum = 425 Average = 200
		4x4 forklift	1	
		Flatbed truck	1	
Site preparation and clearing/grading	2 months	Water truck – 3 axles	3	
		Grader	2	
		Bulldozer	1	
		Scraper	1	
		10-ton roller	1	
		Sheepsfoot roller	1	
		Tractor (with mower attachment)	1	
Underground work (trenching)	3 months	Excavator	2	
		Sheepsfoot roller	1	
		Water truck – 3 axles	1	
		Aussie padder (screening machine)	1	
		4x4 forklift	1	
System installation	5 months	4x4 forklift	10	
		Small crane (80-ton)	1	
		All-terrain vehicle	26	
		Pile driver	5	
		Pickup truck	5	
		5 kw generator	3	
Gen-tie installation	2 weeks	Line truck (with spool trailer)	1	
		Boom truck (with bucket)	1	
Testing and commissioning	3 months	Pickup truck	4	
Site cleanup and restoration	1.5 months	Grader	1	
		Skid loader	1	

5.3 Decommissioning

After the useful life of the project, which is anticipated to be approximately 35 years, the project would either repower, or it would decommission and restore back to useful farm land. A draft Decommissioning Plan has been provided in Appendix 17 that demonstrates how the project would decommission. A fully executed copy of this plan will be provided prior to Approval of the Zoning Certification by the ELUC. The plan will include a cost estimate of the decommissioning prepared by a licensed Illinois Engineer and financial security as prescribed in the Solar Ordinance.

6.0 AGRICULTURAL IMPACTS

Minimal Impacts: The impacts to agricultural Best Prime Farm land has been reduced to a minimum level as described below in the attached analysis (see Table 2). The amount of actual impacts to the ground is only 40 acres, which is comparable of what could be impacted by right if the parcels where used for residential use.

Table 2. Agricultural Impacts

Description	Unit Size	Unit Area	Unit Qty	Area (sqft)	Area (Acres)
Total Property Acres				69,105,326.4000	1,586.4400
Acres Within Fence				49,642,718.4000	1,139.6400
Acres of Solar Panels	83.9" x 41.3"	24.0630	554,175	13,335,105.3275	306.1319
Description	**Foundation Size**	**Foundation Area (sqft)**	**Foundation Qty**	**Impervious Area (sqft)**	**Impervious Area (acres)**
Exterior Gear Pier	W6x15	4.0273	502	2,021.7046	0.0464
Interior Gear Pier	W6x12	3.1211	6,639	20,720.9829	0.4757
Exterior Bearing Pier	W6x9	2.2848	6,368	14,549.6064	0.3340
Interior Bearing Pier	W6x8.5	2.2627	88,218	199,610.8686	4.5824
TFMR Station Pier	W6x15	240	430	103,200.0000	2.3691
Combiner Box Pier	W6x8.5	2.2627	1,007	2,278.5389	0.0523
Compacted Dirt Roads	20'	1014400	1	1,014,400.0000	23.2874
LV Trench	2'	2	81,600	163,200.0000	3.7466
MV Trench	3'	3	66,045	198,135.0000	4.5486
Fence Line Posts	2-7/8" OD SCH40	0.043974	10,157	446.6439	0.0103
Fence Corner Posts	3.5" OD SCH40	0.070904	65	4.6088	0.0001
Fence Gate Posts	4" OD SCH40	0.081812	46	3.7634	0.0001
Substation Foundation	150' x 150'	22500	1	22,500.0000	0.5165
O&M Building Foundation	40' x 40'	1600	1	1,600.0000	0.0367
Total				**1,742,671.7174**	**40.0062**

Agricultural Impact Mitigation Agreement: The project will also enter into a State of Illinois Agricultural Impact Agreement (AIMA) as required by the County Solar Ordinance. A copy of the AIMA is attached in Appendix Three of this report. The AIMA will be executed prior to approval of the Zoning Compliance Certificate by the County ELUC.

Weed Control and Ground Cover: The Project will minimize weeds and provide for year round ground cover that is compatible with the climate of Central Illinois. A biological analysis has been conducted of the soils within the Project to determine the appropriate seed mix that will be applied to the site post construction. See Appendix Five for the Vegetative Ground Cover Management and Weed Control Plan.

Natural Resource Information Report: Soil and Water Conservation Districts are required to prepare Natural Resource Information (NRI) Report under the Illinois Soil and Water Conservation Act of 1977, Illinois Revised Statutes, Chapter Five. The Project will implement the measures outline in this report to preserve soils, drain tiles and the natural environment. See Appendix Four to review the results of the Natural Resource Information (NRI) Report

7.0 TRAFFIC AND HAUL ROUTE

Haul Route and Agreement: Project Representatives have been in contact with the State of Illinois, County Engineer, and the Sidney Village Supervisor to discuss proposed haul routes to deliver materials for the project. A definitive plan and agreement has not been agreed upon, but will be before approval of the Zoning Compliance Certificate by the ELUC. The Engineering Procurement Contractor has not been selected at this time, so the actual logistics cannot be definitively determined until this occurs. A copy of the proposed Haul Routes and Haul Route Agreement has been provided in Appendix Six.

Estimated Traffic Trips: The peak daily construction employee count would be approximately 400 with an average of 200 workers daily. As shown in Table 3, in addition to the 400 maximum daily workers traveling to the site, there would be up to 30 truck trips per day at peak construction activity (when the trenching and system installation phases overlap). A total of up to 425 trips per day are anticipated during peak construction activities, assuming a worst-case scenario whereby no carpooling occurs, though it is likely that carpooling would occur.

Table 3. Project Construction Estimated Truck Activity

Description	Number of Trucks	GVWR	Start	End
Modules	1,014	<80,000	Mar-22	Oct-22
Racking	606	<80,000	Feb-22	Oct-22
Piles	115	<80,000	Feb-22	Oct-22
Generator Step-up Transformer	1	275,000	Jun-22	Jun-22
Substation	15	<80,000	Jun-22	Aug-22
Inverters/MV Transformer	61	<80,000	Jun-22	Aug-22
Cable	29	<80,000	Mar-22	Aug-22
Electrical Accessories	50	<80,000	Mar-22	Oct-22
Combiner Boxes	14	<80,000	Jun-22	Aug-22
Other	15	<80,000	Mar-22	Oct-22
Total	**1,920**			

Note: This does not account for construction equipment deliveries or water trucks.

Delivery of material and supplies would reach the site through on-road truck delivery via US-150, IL-130, and County Road 1000 N. The majority of the truck deliveries would be for the PV system modules. It is estimated that a total of up to 1,920 truck trips would be required to complete the Project. These truck trips would be intentionally spread throughout the construction day to optimize construction efficiency, as is practical, by scheduling deliveries at predetermined times.

8.0 NOISE

The heaviest delivery loads to the site would also consist of the tracker or fixed-tilt structures, and the delivery of the generator step-up transformer. These loads would typically be limited to a total weight of 80,000 pounds, with a cargo load of approximately 25 tons, or 50,000 pounds, tracker/fixed-tilt structures. The generator step-up transformer could be up to 275,000 pounds. Low-bed transport trucks would carry the construction equipment to the site as needed. The size of the low-bed truck (axles for weight distribution) would depend on the equipment transported.

Predicted sound levels from the proposed Prairie Solar facility would fall well below limits specified under 35 Illinois Administrative Code Subtitle H: Noise Parts 900, 901, 910, with conversion of these octave-band based limits to single value dBA pressure levels. Reference to the highly intrusive sound limits in Section 901.103 which are expressed in dBA provides confidence the Section 901.102 limits converted to dBA sound pressure limits are appropriate and reasonable, and probably represent more stringent restrictions with regard to allowable sound levels. The proposed Prairie Solar project would therefore comply with noise restrictions applicable to the project.

The applicant proposes to equip each and every inverter with a sound reduction kit from the manufacturer. The assessment of operational noise with the inverters equipped with this sound reduction kit concludes that operational sound levels would be less than 39 dBA Leq at all existing residences within 1500 feet of the project site. A final analysis would be provided with “the building plan set to the ELUC for Zoning Certification approval.” A copy of the Noise Analysis has been provided in Appendix Seven.

9.0 DRAINAGE AND TILE

In order to maintain local drainage systems and preserve the ability for continued farming after the duration of the project, the applicant proposes utilizing existing tile system replacement by "like kind" procedures. This will ensure reliable tile performance, protection for the project duration, and preserve future farming operations.

Replacement by "like kind" procedures are more construction intensive than the avoidance protection method and will require as follows:

(1) All existing agricultural drain tile systems are field staked and delineated in accordance with the Drainage Investigation Plan.

(2) All existing clay drain tile systems are removed by "like kind" procedures which include the removal and replacement of all original systems including the same size, depth, grade and location. (Please see Diagram No. 20A, on Page 5 of the Agricultural Drainage Considerations Report)

(3) Existing drain tile "like kind" replacement which conflict with specific solar support column locations will need to be rerouted by "warp route" installation and would maintain a lateral separation from the support column of ≥4ft.

(4) All existing drain tiles that egress or ingress the solar site would include a 6" online riser pipe located on or within 2ft (+-) of the project boundary (or as otherwise indicated by project owner). This riser pipe will serve as an observation port for flow verification, system identification and pipeline ventilation. (Please see Diagram No. 27D, on Page 6 of the Agricultural Drainage Considerations Report)

(5) All additional existing drain tile feeder laterals encountered during the "like kind" replacement process and not listed on investigation plans shall be evaluated and considered for replacement by this same procedure.

(6) All existing replacement systems shall be located by GPS at state plane coordinates and drafted on record plans.

For more information please refer to Agricultural Drainage Considerations Report by Huddleston McBride Land Drainage Services in Appendix Eight.

10.0 FIRE DEPARTMENT

In accordance with Section 6.1.5.H, Standard Conditions for Coordination with Local Fire District (1-2), of Champaign County, Illinois Zoning Ordinance:

BayWa r.e. has submitted to the Sidney Fire Protection District a copy of the proposed Prairie Solar, LLC project site plan

As requested by the Sidney Fire Protection District, BayWa r.e. agrees to cooperate with the Sidney Fire Protection District to develop a Fire Protection District and EMS Response Plan. Additionally, BayWa r.e. will provide emergency response training to the Sidney Fire Protection personnel, volunteers, and others as identified by the Sidney Fire Protection District.

For more information please refer to the letter from the Sidney Fire Protection District dated October 6, 2018 in Appendix Nine.

11.0 LANDSCAPING

A landscape plan has been prepared in accordance with the Champaign County Solar Ordinance. This plan screens the solar project from residential views within 1,000 feet of a residence. The plan also takes recommendations from biological analysis provided in Appendix Five. Vegetative Ground Cover Management and Weed Control Plan for compatible ground cover and plant species that will survive and thrive in the Central Illinois Climate. See Appendix Ten.

12.0 ECONOMIC BENNEFIT ANALYSIS

JEDI Analysis: The project will have a positive economic benefit to the Champaign County. As calculated by the National Energy Laboratory (NREL) Jobs and Economic Impact Model (JEDI) the project would have an approximate effect on the local Champaign County Communities:

During Construction:

Local construction and installation jobs: 744.8 Full Time Equivalent (FTE)

Local spending $138,463,028

During Operation:

Local jobs: Facility 15.6 Full Time Equivalent (FTE)

Local annual spending: $3,647,940 (includes wages, taxes, locally purchased materials, and leases)

Illinois Property Tax: The Project would also have a tremendous boost to the local tax base as determined by the recently approve law that assesses Solar Farms at a rate of $218,000 per MW. The following is the first-year assessment and would reduce annually. See Appendix 11 for letters from Law Firm Meyer Capel regarding the analysis.

Fair Market Value (FMV): 150 MW x $218,000 = $32,700,000
Equalized Assessed Value (1/3 FMV): $10,900,000

	Tax rate	Total $
Champaign County	0.8481	$ 92,442.90
Forest Preservation District	0.0925	$ 10,082.50
Parkland College	0.5411	$ 58,979.90
Tolono CUSD #7	4.2661	$ 465,004.90
Sidney Fire Protection	0.2	$ 21,800.00
Sidney Township	0.2285	$ 24,906.50
Sidney Road and Bridge	0.2525	$ 27,522.50
Sidney Permanent Road	0.1477	$ 16,099.30
Sidney Cemetery	0	$ -
Totals	**6.5765**	**$ 716,838.50**

13.0 GLARE ANALYSIS

After review of the GlareGauge analysis, POWER Engineers, Inc. (POWER) determined potential glare visible from the proposed solar operations is limited to the inactive Justus RLA Runway 18 approach midday during the winter months. Potential glare reported has a hazard level of "yellow" with the potential for temporary after-image. No other occurrences of potential glare were reported for residential or motorist viewers due to the rotational limits and wake/stow procedures of solar operations.

Should the Justus RLA return to operational status, POWER encourages communication with the FAA so potential glare occurrences may be documented in the Justus RLA's additional remarks and/or instrument procedures to inform pilots when and where potential glare may be visible.

Based on these findings, it is POWER's professional opinion that the proposed Prairie Solar Energy Project will not impact active airport operations or cause distraction to nearby residences and motorists.

For more information please refer to Prairie Solar Energy Project Glare Study prepared by POWER Engineers in Appendix 12.

14.0 HEALTH AND SAFETY

Photovoltaic (PV) technologies and solar inverters are not known to pose any significant health dangers to their neighbors. The most important dangers posed are increased highway traffic during the relative short construction period and dangers posed to trespassers of contact with high voltage equipment. This latter risk is mitigated by signage and the security measures that industry uses to deter trespassing. The risks of site contamination are much less than for most other industrial uses because PV technologies employ few toxic chemicals and those used are used in very small quantities. Due to the reduction in the pollution from fossil-fuel-fired electric generators, the overall impact of solar development on human health is overwhelmingly positive. This pollution reduction results from a partial replacement of fossil-fuel fired generation by emission-free PV-generated electricity, which reduces harmful sulfur dioxide (SO2), nitrogen oxides (NOx), and fine particulate matter (PM2.5). Analysis from the National Renewable Energy Laboratory and the Lawrence Berkeley National Laboratory, both affiliates of the U.S. Department of Energy, estimates the health-related air quality benefits to the southeast region from solar PV generators to be worth 8.0 ¢ per kilowatt-hour of solar generation. This is in addition to the value of the electricity and suggests that the air quality benefits of solar are worth more than the electricity itself.

For more information please refer to the NC Clean Energy Technology Center's Report on Health and Safety Impact of Solar Photovoltaics in Appendix 13.

15.0 EQUIPMENT SPECIFICATIONS

In accordance with Section 6.1.5.E.(2)a of Champaign County, Illinois Zoning Ordinance, all electrical components of the project will conform to the National Electrical Code (NEC) and will comply with Federal Communications Commission (FCC) requirements.

The applicant has provided examples of equipment specification sheets. Exact equipment specifications will be provided during the building plans submittal, required by the Environment and Land Use Committee (ELUC) for the Zoning Compliance Certificate.

For more information please refer to the example equipment specification sheets in Appendix 14.

16.0 THREATENED AND ENDANGERED SPECIES

Jackson Group completed a desktop review and agency coordination to address threatened and endangered species with potential to occur at the Proposed Prairie 1 Solar Farm in Champaign County, Illinois. Communications with the U.S. Fish and Wildlife Service - Marion Illinois Field Office (USFWS) and a review of the USFWS's Information for Planning and Consultation (IPaC) tool for the proposed project yielded four federally protected species covered under the Endangered Species Act (ESA) with potential to occur within the most current project boundary. No critical habitat for these species was identified within the project boundary.

For more information please refer to the letter from Jackson Group dated October 2, 2018, and their supporting studies in Appendix 15.

17.0 CULTURAL AND HISTORIC REVIEW

Historic and Cultural Resources: Consultation is still in process with the State of Illinois Historic Preservation Office (SHPO). Desktop analysis has been performed by the Jackson Group and there are no historic structures or anticipated sensitive cultural resources in the existing farm fields. See the letter from the Jackson Group in Appendix 16.